

Remarks

This response is submitted together with a Request for Continued Examination and assumes entry of the amendments made in the December 17, 2009 Response into the official file.

The Applicants have added new Claims 36 and 37. New Claim 36 recites that the ferrite phase is present at a volume fraction between 15% and 60%. Support may be found on page 22 at line 1. Claim 37 recites that the volume fraction of the martensite phase is at most 75.8%. Support may be found in Claim 24 which recites that the martensite phase constitutes the balance of the volume fraction as well as Example 1 of Table 2 on page 28, which defines that the balance is at most 75.8%. Entry of new Claims 36 and 37 into the official file is respectfully requested.

The Applicants note with appreciation the Examiners' detailed comments in the Advisory Action which address the hypothetical applicability of JP '009. The Applicants respectfully submit, however, that JP '009 is inapplicable for the reasons set forth below.

First, the Advisory Action acknowledges certain of the Applicants arguments with respect to equation (2) of Claim 24 and equation 1 of JP '009. However, that acknowledgement states that those remarks do not constitute factual evidence since they are not in Declaration form. The Applicants therefore enclose a Declaration of Mitsuo Kimura, which includes the remarks made in the December 17, 2009 Response and as acknowledged in the Advisory Action. Thus, the Applicants respectfully submit that those remarks are now factually established and further factually establish that the steels of JP '009 are different than those as recited in Claim 24.

The Applicants respectfully submit that these findings are also indicative that the differences are not the fruit of "routine investigation by one skilled in the art." In that regard,

the Applicants invite the Examiner's attention to the Declaration of Mitsuo Kimura, wherein the Declaration establishes that ranges between equation (2) and (1) are completely opposite. This is an unexpected finding that would not reasonably be expected by one skilled in the art beyond any alleged routine investigation. At best, one might consider some differences, but opposite findings are unexpected, surprising and not the results of routine investigation. The Applicants therefore respectfully submit that the application is in condition for allowance on this basis alone.

The Advisory Action also acknowledges the Applicants' remarks with respect to references to the Applicants' examples in its Specification as well as Examples taken from JP '009. However, the Advisory Action further states that:

in the absence of factual evidence to the contrary, the Examiner maintains the position that since the composition and microstructure of austenite and martensite of the stainless steel pipe of JP '009 is similar to the composition and microstructure of austenite and martensite of the instant invention and since the pipe is made using a similar method, one of ordinary skill in the art would expect the stainless steel seamless pipe of JP '009 to have a similar volume fraction of ferrite phase. Applicant has not provided evidence to show that the stainless seamless steel pipe of JP '009 is materially different from the pipe of the instant invention.

This statement is not understood. The Applicants have indeed provided facts as to characteristics of the Applicants' claimed subject matter. Those facts were pulled directly from the Applicants' Specification which was submitted under oath. Those facts therefore constitute evidence of the characteristics of the Applicants' claimed subject matter.

On the other hand, the Applicants have provided additional facts which characterize the closest prior art, namely JP '009. Those facts are taken directly from JP '009. There can be no contesting that this information taken from the Applicants' Specification and from JP '009

constitutes “factual evidence” on this record. Thus, these facts cannot be merely ignored as evidence. Those facts are evidence and must be considered. Thus, it would be in error to make the statement of “in the absence of factual evidence to the contrary.” The Applicants have provided factual evidence and it would be improper to simply ignore that evidence.

It could be argued that the Applicants’ evidence is not persuasive such as for the reason that the evidence is not limited to specific embodiments taken from JP ‘009. Assuming *arguendo* the truth of this proposition, the Applicants do not agree that the factual evidence is not persuasive. While the Applicants fully agree that JP ‘009 is not limited to the specific embodiments shown, those specific embodiments do provide teachings and do provide expectations to those skilled in the art. The Applicants respectfully submit that if one skilled in the art were to view the facts taken from JP ‘009 from the specific embodiments, those skilled in the art would develop reasonable expectations. Those expectations would be that the pipes of JP ‘009 would likely have selected characteristics based on the embodiments shown. This is particularly true if a consistent pattern is demonstrated.

In this case, those specific embodiments provide a pattern of expectations and the Applicants respectfully submit that the patterns would lead one skilled in the art based on the evidence taken from the Applications’ Specification that the steels would likely be quite different. This is particularly true since the only factual evidence on the record is consistent and leads those skilled in the art to have a reasonable expectation that the steels are different. There are no additional facts on the record that are contrary to the establishment of that reasonable expectation. There is merely speculation set forth in the rejection that is contrary to the reasonable expectation. However, guesses and speculation do not trump the Applicants’ factual

evidence already on this record. Thus, this is yet another reason why JP '009 is inapplicable to the claimed subject matter.

However, the fundamental basis of the rejection is flawed. In that regard, the Advisory Action states that the JP '009 pipe is made "using a similar method." There is nothing on the record indicating that the methods are similar. The Applicants respectfully submit that the Applicants' methodology and the methodology of JP '009 are actually quite different. There are several locations for discussion of methodology in JP '009. The English translation contains such discussions in paragraphs [0027-0030].

It can, therefore, be seen that after the JP '009 pipe is produced, the pipe is cut into pieces, heated to 920°C and then air cooled after one hour. Subsequently, an annealing treatment at 540-620°C, is applied for 30 minutes. The Applicants respectfully submit that this process is quite different from the Applicants' process. For example, the Applicants invite the Examiner's attention to paragraphs [0056] through [0058] which recites a multi-step process of cooling a hot worked pipe down to room temperature at a cooler rate faster than air cooling, reheating the pipe to $\geq 850^{\circ}\text{C}$, cooling at a rate faster than air cooling to a temperature of $\leq 100^{\circ}\text{C}$, heating the pipe to $\leq 700^{\circ}\text{C}$, and then cooling the pipe at a rate faster than air cooling. The Applicants provide teachings as to what happens during those various steps so that the final product results in the steel having an austenite phase at a volume fraction between 2.6 and 30%, a ferrite phase at a volume fraction between 10-60% and a martensite phase being the balance of the volume fraction.

These methodologies have been factually established as being quite different between the Applicants and JP '009. The Applicants therefore respectfully submit that the Applicants' have established that the methodology is not "similar." The effect of this is that one skilled in the art

would have a reasonable expectation that the morphology of the Applicants' steels versus those of JP '009 would inherently or likely not be the same, but would be inherently or likely to be different. This is, of course, established by the Examples in the Applicants' Specification and the Examples in JP '009. Thus, the Applicants respectfully submit that there is a large amount of factual evidence on this record demonstrating that the Applicants' steels are different from JP '009. Withdrawal of the rejection is respectfully requested.

In light of the foregoing, the Applicants respectfully submit that the entire Application is now in condition for allowance, which is respectfully requested.

Respectfully submitted,



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